



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,877	02/05/2004	Albert R. Harvey	2507-5787.2US (21811-US-0)	5564
24247	7590	07/07/2004	EXAMINER KOSLOW, CAROL M	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			ART UNIT 1755	PAPER NUMBER

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/772,877	Applicant(s) HARVEY ET AL.	
	Examiner C. Melissa Koslow	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/5/04, 3/22/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicant has complied with the conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 and 119(e).

The articles having a line drawn through them and cited in the information disclosure statement filed 5 February 2004 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Copies of these articles were not found in the parent application and thus could not be considered.

Claims 2 and 15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims.

It appears the limitation in claims 2 and 15 are the inherent structure of vapor-grown carbon fibers. Thus the limitation does not appear to further limit claims 1 and 14.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 9 states the crosslinkable polymer comprises about 55-70 wt% of the precursor composition. Paragraph [0031] teaches the crosslinkable polymer comprises about 55-70 wt% of the total composition, which is both the fibers and the precursor composition. This discrepancy needs to be corrected.

Art Unit: 1755

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5, 8 and 10-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,691,505.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the patent teach the claimed material and process.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1755

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. patent 5,409,775.

This reference teaches a composite comprising vapor-grown carbon fibers, which have the claimed structure, and a rubber material, which is a cured elastomer (col. 8, line 21). The reference clearly teaches the claimed material.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,409,775.

As stated above, this reference teaches the claimed material. The taught fibers have a diameter in the range of 0.1-3 microns and a length of 90 micron and shorter. These ranges overlap the claimed ranges. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). The reference suggests the claimed material.

Claims 1, 2, 5, 6, 8, 10, 14, 15, 18, 19 and 23-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. patent 5,989,459.

This reference teaches an insulting material made from a cured precursor composition comprising a crosslinkable elastomer and about 0.5 wt% vapor-grown carbon fibers having a length of 50-100 microns. The taught fibers inherently have the claimed structure and the amount and length fall within the claimed ranges. The crosslinkable polymer can be polybutadiene or polyisoprene. The examples show that the fibers are homogenous mixed or dispersed with the crosslinkable precursor. The examples also show the mixing occurs under solvent free conditions. The reference teaches the claimed material and process.

Art Unit: 1755

Claims 3, 4, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,989,459.

As stated above, this reference teaches the claimed material. The taught fibers have a diameter in the range of less than 1 micron. These ranges overlap the claimed ranges. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). The reference suggests the claimed material and process.

Claims 1, 2, 8, 10, 11, 14, 15, 19, 20 and 23-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 08-127674.

This reference teaches a material comprising natural or synthetic rubber and vapor-grown carbon fibers, which inherently have the claimed structure. The material is produced by homogenously mixing or dispersing the fibers with a crosslinkable rubber polymer, such as the precursor for natural rubber or polyisoprene or polybutadiene, and a sulfur containing curative. The examples show that the precursor mixture is solvent free. The reference teaches the claimed material and process.

Claims 3-7, 12, 13, 16-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 08-127674.

As stated above, this reference teaches the claimed material and process. The taught amount of fibers of 10-150 parts by weight corresponds to about 6.7-45.4 wt% of the composition. This range overlaps the claimed range. It is noted that the amount of crosslinkable polymer is about 30-66 wt% of the composition. The taught fibers having a diameter of 0.05-0.5

Art Unit: 1755

microns and a length of 10-100 microns, both of which overlap the claimed ranges. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). Since the composition overlap that claimed and the fiber size overlaps that claimed, one of ordinary skill in the art would expect the taught composition to have a volume resistivity, tear resistance, parallel tensile strength and perpendicular and parallel elongation ranges to overlap the claimed ranges, absent any showing to the contrary. The reference suggests the claimed material and process.

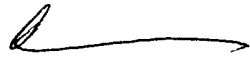
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
July 6, 2004


C. Melissa Koslow
Primary Examiner
Tech. Center 1700